

Remarks

The office action dated 04-26-05 objected to the specification for errors in referencing figure numbers. The amendment to the paragraph starting at line 21, page 8 changes the reference from Figure 7 to Figure 6. The amendment conforms the specification to the drawings in which Figure 6 is the correct reference for head 26C. The amendment to the paragraph starting at line 26, page 8 changes the reference from Figure 8 to Figure 7. The amendment conforms the specification to the drawings in which Figure 7 is the correct reference for head 26D.

The Examiner objected to the specification stating that the definition of the phrases "length along the air-bearing surface" and "thickness of the coil" as used in the claims has not been sufficiently defined. Applicants respectfully disagree.

Claim 1, for example, recites that "the trailing shield confronting the main pole piece to form a write gap with a length along the air-bearing surface that is less than a thickness of the coil between the main pole piece and the return pole piece...." Reference to figure 2 shows that the ABS is a horizontal line across the figure and the main pole piece 42 is confronted by the trailing shield 44 which extends from the return pole piece 43. The coil 35 is located between the return pole piece 43 and the main pole piece 42.

On page 5, line 28 the specification states that "Without the trailing shield the write gap in this design is limited by the thickness of coil 35 which passes between the main pole piece 42 and the return pole piece 43." This clearly indicates that the thickness of the coil being referenced is measured along the horizontal line parallel to the ABS as shown in figure 2.

Therefore, applicants respectfully submit that the concepts of length of the write gap along the air-bearing surface are unambiguously defined in the specification

and figures for one of ordinary skill in the art. The applicants respectfully request that the objection be withdrawn.

The third paragraph of the office action rejected claims 1-21 under section 112 second paragraph for being directed to subject matter not disclosed in the specification, but no additional details were given. Reference was made to the object based on the length and thickness points addressed above. Applicants believe that these points have been fully addressed above and respectfully request that this rejection be withdrawn.

The fourth paragraph of the office action objected to the drawings under 37 CFR 1.83(a) referring back to the length and thickness points. Applicants believe that these points have been fully addressed above and respectfully request that this rejection be withdrawn.

The fifth paragraph of the office action rejected claims 1-11 and 17-21 under section 112 second paragraph for ambiguous references to "shields." Applicants have amended the relevant claims along the lines indicated by the Examiner, and, therefore, believe that this rejection has been fully addressed.

The sixth paragraph of the office action rejected claims 12 and 15-16 under section 102(a) citing the applicants' disclosed art relating to figure 1 without further elaboration. Applicants respectfully disagree. Figure 1 illustrates a prior art head 26 for perpendicular recording and the associated media 27. The head 26 has a trailing shield pole 33 and side shields (not shown). Claim 12 includes:

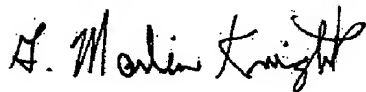
"a trailing shield with a pedestal and a tip, the pedestal being connected to the return pole piece and extending along the air-bearing surface toward the main pole piece, the tip being attached to the pedestal and confronting the main pole piece to form a write gap with a length along the air-bearing surface that is less than a thickness of the coil between the main pole piece and the return pole piece, the tip having a cross-section area

orthogonal to the air-bearing surface which is smaller than a cross-section area of the pedestal orthogonal to the air-bearing surface."

The head shown in figure 1 does not meet the requirements of the claim language on several points. First the prior art head shown does not have a pedestal or a tip as claimed. Likewise, the prior art head does not meet the requirement that the tip have a smaller cross section area than the pedestal. Therefore, applicants believe that claim 12 and all of its dependent claims distinguish over the cited prior art and respectfully request that the rejection be withdrawn.

Applicants believe that the amendments above place the application in condition for allowance.

Respectfully submitted,



G. Marlin Knight (Reg. Number 33,409)
(customer no. 000041482)
PO Box 1320
Pioneer, CA 95666
209-295-1982